UI Bulletin #161b

Subject:	Intermittent Cluster, Radio and HVAC Display Resets on Snow Plow Trucks
Models/Years Affected:	2020 – beyond Chevrolet Silverado 2500-3500 HD 2020 - beyond GMC Sierra 2500-3500 HD With Snow Plow Prep Package (RPO VYU)
Origination Date:	January 16, 2020
Revision Date:	February 8, 2021

ADVISORY:

Condition/Concern:

Some trucks equipped with option VYU [Snow Plow Prep] and a snow plow, may exhibit occurrences in which the Instrument Panel Cluster (IPC), Radio and HVAC displays may "blank out" or reset after changing the snow plow position. This condition is caused by a system voltage over-shoot phenomenon called 'load dump'. When the large electrical draw of the plow pump motor is suddenly removed the field energy that is built up in the alternator causes a system voltage overshoot that momentarily moves above the normal design operating levels for the module displays. As a result, the displays will shut down or reset causing the momentary blank out condition. The modules are designed to do this and immediately recover. *No modules* should be replaced for this condition.

Repair/Recommendation:

Contact your local GM Dealer for an appointment to install **P/N is 84731643 (HD only) VYU Snow Plow Jumper harness** per the latest version of **GM Service Bulletin PIT5387G.** If your truck has RPO VYU and did not come with the harness parts they may be ordered by your dealer.

Note: This jumper harness and installation will be provided [one time] without charge. Installation charges will be waived only if the jumper is installed at your GM dealer.

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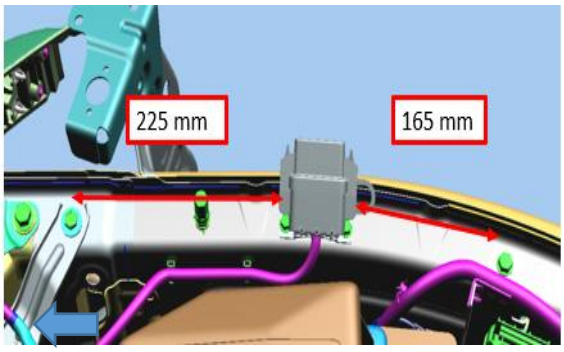
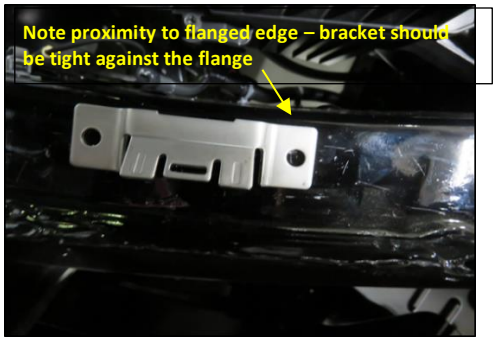
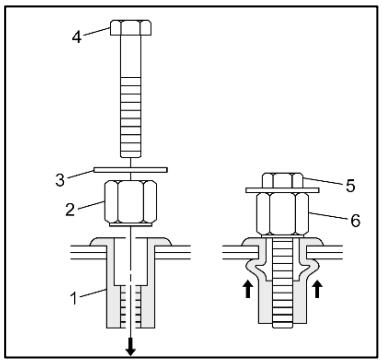
Installation Instructions:

1) Locate and drill holes (9.0mm) for the mounting location of the mini electrical center per figure (TBD). Use the mounting bracket as a template for holes as shown in figure TBD Be sure to use a drill suitable for high strength steel and a lubricating oil/fluid
2)





3) Once drilled holes are completed install the 2 riv-nuts included in the kit (see figure TBD) using GM Special Service Tool BO-42151-6MM-KIT or equivlent (shown in figure TBD) as follows:
   a) Apply lubricant to bolt threads. Insert bolt (4) through washer (3) and anvil (2) into rivet nut (1) until finger tight.
   b) Insert rivet nut assembly into hole in sheet metal.
   c) Hold anvil (6) with 9/16" wrench and tighten bolt (5) with 10 mm wrench to crimp the rivet nut approximate 3 turns. *Do not over tighten.*
   d) Remove bolt, washer and anvil.



4) Remove Air Cleaner Outlet Duct (Figure TBD) per GM Service Information Link below.
   Air Cleaner Outlet Duct Replacement

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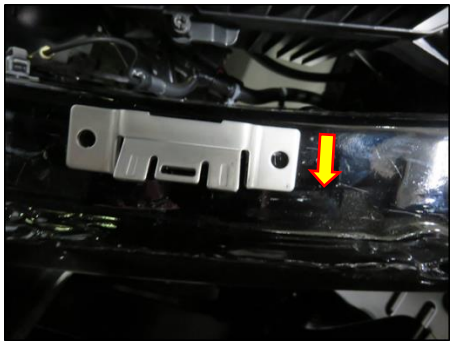
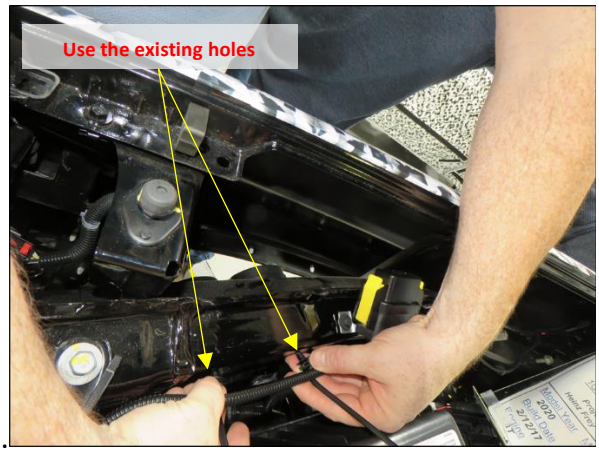
5) Using the supplied 6mm bolts, loosely install the bracket for the mini electrical center such that center retaining tab faces outboard from the flanged edge (refer to figure TBD).



6) After you have installed the bracket, attach the relay box to the bracket mount

7) Using 2 of the supplied combination tie strap/clip retainers, route and secure as shown in figure TBD.



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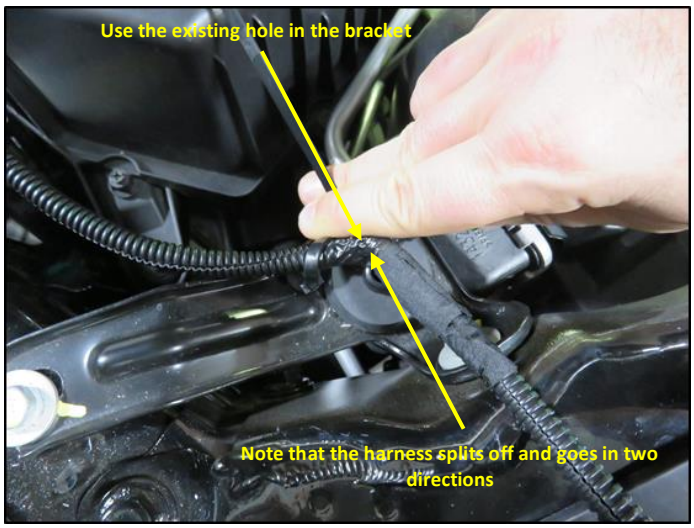
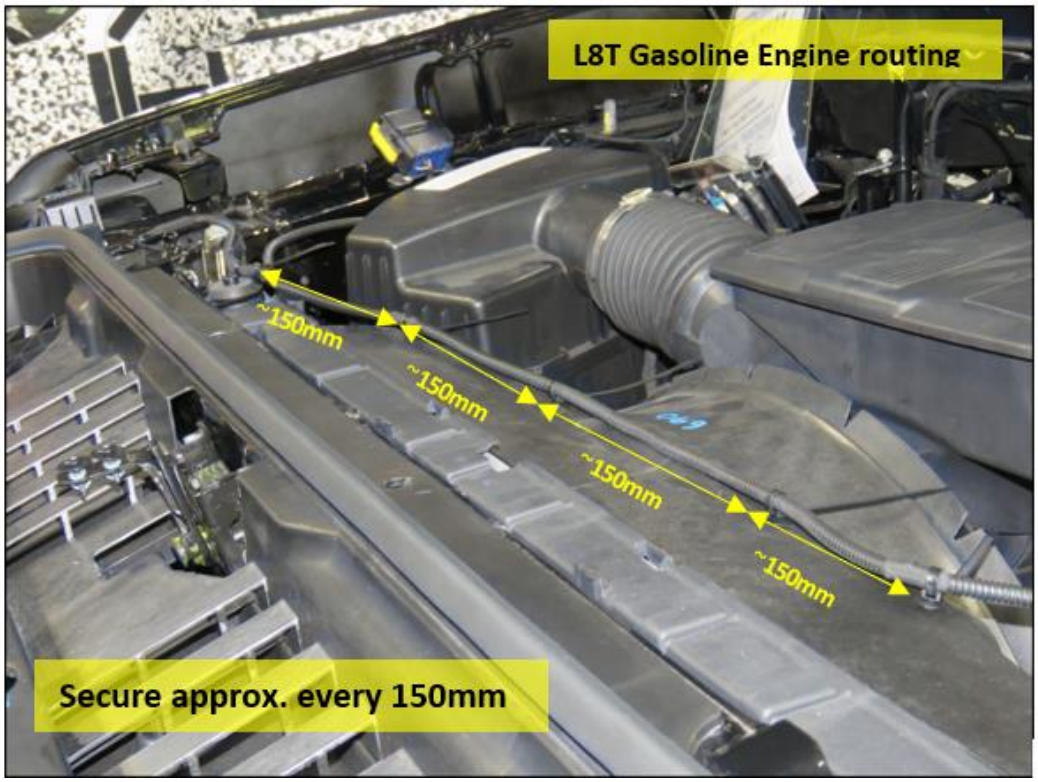
8) Continue routing and securing the wiring harness using the combination tie strap/clips provide. Secure to the center radiator support bracket as shown in figure TBD



9) In figures TBD it is shown the harness splits off in 2 different directions. The large bundle will be routed across and secured using the tie strap/clips to the 6.5mm holes that are needed to be drilled into the cooling fan shroud as shown in figure TBD



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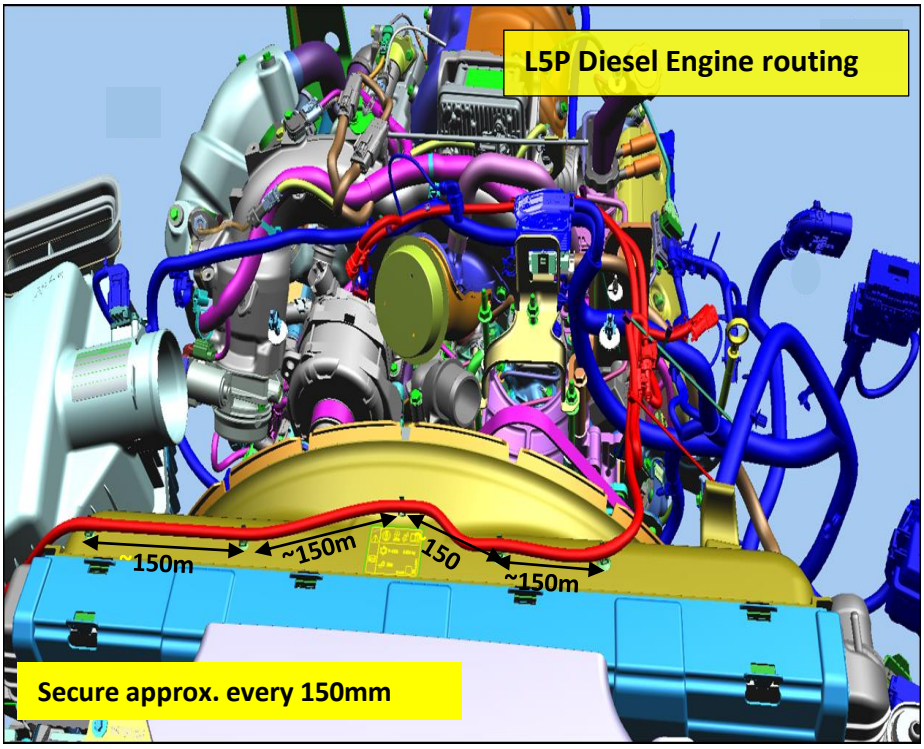

10)

11) The smaller bundle is routed beneath the air baffle

12) **Single generator systems**:

a) Unplug the 2-way connector on the generator. (Figure 1)

b) Identify the master generator connector [at the very tip of the harness when it is fully extended]. Insert it in the alternator.

c) Take the original alternator connector and plug it into the mating jumper harness connector.
Note: In this case the second alternator connector will be unused and will remain capped and tied to the harness bundle.

13) **Dual generator systems:**

a) Unplug the control connectors on both alternators.

b) Identify the master alternator connector [at the very tip of the harness when it is fully extended]. Insert it in the 'master' alternator on the RH side of the engine.

c) Identify the 'slave' alternator connector on the jumper harness and insert it in the LH 'slave' alternator. Insert the removed LH alternator connector into the [unwired] cap on the jumper harness.

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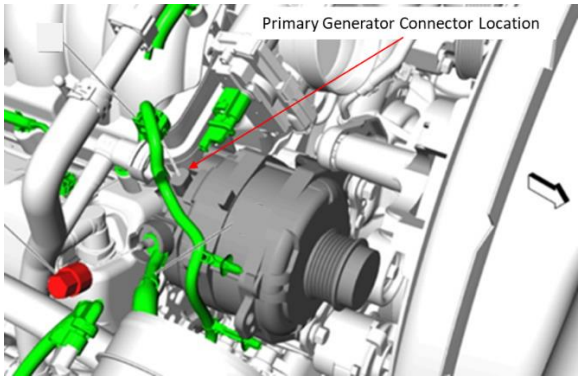
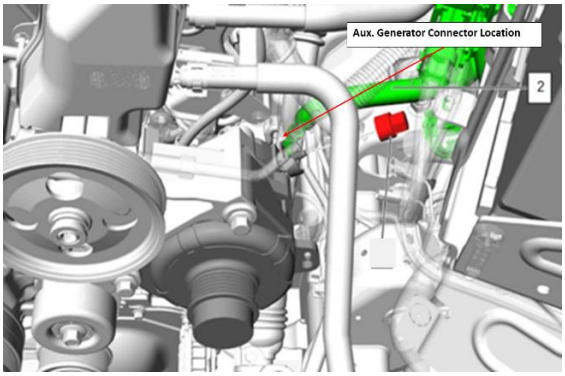
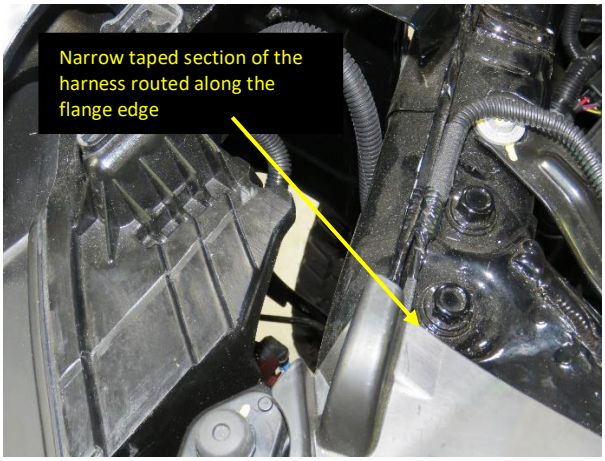


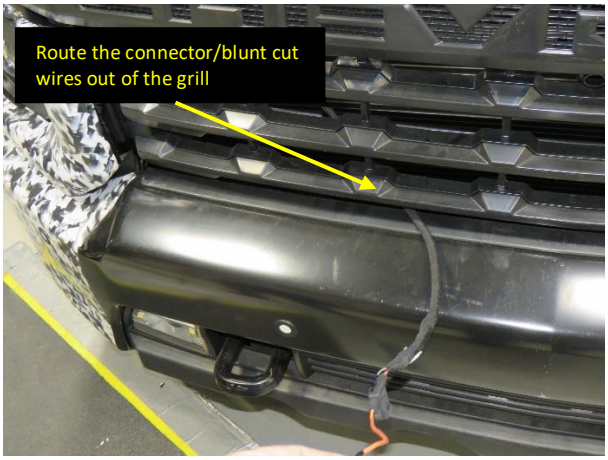


14) Remove the Intake Air Baffle per the service replacement procedure (link provided below)

    Intake Air Baffle Replacement

15) Route the two wires of the harness such the taped portion is located as shown in figure (TBD) when the Intake Air Baffle is reinstalled. Route the harness with the connector and blunt cut wires out through the front grill like figure (TBD)





16) Reinstall all removed components.
17) The blunt wires will need to have the orange colored wire connected to power source that is active went the snow plow is being operated (moved) and the black wire to a ground source. This enables the relay to open the generator control circuit resulting on the generator operating at a base charging voltage and all but eliminating the “blank” condition of the vehicle control modules.

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